

AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as shown below.

This listing of claims replaces all previous versions and listings of claims in the present application.

Listing of Claims

1-4. (Canceled)

5. (Previously Presented) A non-transitory information recording medium storing data which can be accessed from an accessing device, comprising:

 a storage device configured to store data and having plural areas respectively managed by independent file systems;

 an area information storage configured to store information about size and position of each area of the storage device;

 a host interface configured to receive a command for setting a size of each area of the storage device from the accessing device;

 an area size setter configured to set size and position of each area of the storage device based on a predetermined setting condition according to the command received from the accessing device; and

 an authentication controller configured to authenticate the accessing device,

 wherein the storage device has an authentication area which allows access from the accessing device only when authentication by the authentication controller is successful, and a

non-authentication area which allows access from the accessing device regardless of a result of the authentication by the authentication controller,

wherein the non-authentication area and authentication area individually have plural areas, and each area in the non-authentication area has a corresponding area in the authentication area,

wherein the predetermined setting condition comprises a ratio of a size of an area included in the non-authentication area to the size of the corresponding area included in the authentication area,

wherein the host interface receives the size of one area in the non-authentication area or authentication area from the accessing device, and

wherein the area size setter determines the size of each area in the non-authentication area and authentication area on the basis of the received size of one area and the ratio, and sets the information to be stored in the area information storage on the basis of the received size and determined size.

6. (Previously Presented) A non-transitory information recording medium storing data which can be accessed from an accessing device, comprising:

a storage device configured to store data and having plural areas respectively managed by independent file systems;

an area information storage configured to store information about size and position of each area of the storage device;

a host interface configured to receive a command for setting a size of each area of the storage device from the accessing device;

an area size setter configured to set size and position of each area of the storage device based on a predetermined setting condition according to the command received from the accessing device; and

an authentication controller configured to authenticate the accessing device,

wherein the storage device has an authentication area which allows access from the accessing device only when authentication by the authentication controller is successful, and a non-authentication area which allows access from the accessing device regardless of a result of the authentication by the authentication controller,

wherein the non-authentication area and authentication area individually have plural areas, and each area in the non-authentication area has a corresponding area in the authentication area,

wherein the predetermined setting condition comprises a ratio of a size of an area included in the non-authentication area to a size of the corresponding area included in the authentication area,

wherein the host interface receives the size of each area in the non-authentication area or the authentication area from the accessing device, and

wherein the area size setter determines the size of each area in the non-authentication area and the authentication area on the basis of the received size of each area and the ratio, and sets the information to be stored in the area information storage on the basis of the received size and determined size.

7. (Previously Presented) A non-transitory information recording medium storing data which can be accessed from an accessing device, comprising:

a storage device configured to store data and having plural areas respectively managed by independent file systems;

an area information storage configured to store information about size and position of each area of the storage device;

a host interface configured to receive a command for setting a size of each area of the storage device from the accessing device;

an area size setter configured to set size and position of each area of the storage device based on a predetermined setting condition according to the command received from the accessing device; and

an authentication controller configured to authenticate the accessing device,

wherein the storage device has an authentication area which allows access from the accessing device only when authentication by the authentication controller is successful, and a non-authentication area which allows access from the accessing device regardless of a result of the authentication by the authentication controller,

wherein the non-authentication area and authentication area individually have plural areas, and each area in the non-authentication area has a corresponding area in the authentication area,

wherein the predetermined setting condition comprises a composition ratio of each area in the non-authentication area or the authentication area,

wherein the host interface receives sizes of respective areas in one of the non-authentication area and the authentication area from the accessing device, and

wherein the area size setter calculates the composition ratio from the received sizes of respective areas, determines sizes of respective areas in an other of the non-authentication area

and the authentication area on the basis of the calculated composition ratio, and sets the information to be stored in the area information storage according to the received sizes and determined sizes.

8. (Previously Presented) A non-transitory information recording medium storing data which can be accessed from an accessing device, comprising:

a storage device configured to store data and having plural areas respectively managed by independent file systems;

an area information storage configured to store information about size and position of each area of the storage device;

a host interface configured to receive a command for setting a size of each area of the storage device from the accessing device;

an area size setter configured to set a size and a position of each area of the storage device based on a predetermined setting condition according to the command received from the accessing device; and

an authentication controller configured to authenticate the accessing device,

wherein the storage device has an authentication area which allows access from the accessing device only when authentication by the authentication controller is successful, and a non-authentication area which allows access from the accessing device regardless of a result of the authentication by the authentication controller,

wherein the non-authentication area and authentication area individually have plural areas, and each area in the non-authentication area has a corresponding area in the authentication area,

wherein the area information storage stores plural combinations of sizes of areas included in the non-authentication area and the authentication area,

wherein the host interface receives specifying information indicating one combination, from the accessing device, and

wherein the area size setter selects the one combination from the plural combinations stored in the area information storage according to the received specifying information, and sets the size of each area in the non-authentication area and authentication area according to the selected combination.

9. (Canceled).

10. (Previously Presented) The non-transitory information recording medium according to claim 5, wherein the area size setter allows only a discrete value for the size received from the accessing device.

11. (Previously Presented) The non-transitory information recording medium according to claim 5, wherein the area size setter sets the size of each area of the storage device to be larger than a total size of inaccessible blocks, which is calculated by an entire size or each area size of the storage device and a rate of accessible blocks.

12. (Previously Presented) The non-transitory information recording medium according to claim 5, wherein the size of m areas included in the authentication area, and the size of n areas included in the non-authentication area (m and n are integers of 0 or more, $m+n \geq 2$) are fixed

size.

13-15. (Canceled).

16. (Currently Amended) An accessing device for writing and reading data to and from an information recording medium storing data and having an authentication area which allows access only when authentication is successful and a non-authentication area which allows access regardless of a result of the authentication, the non-authentication area and authentication area respectively having plural areas, [[,]] the accessing device comprising:

a slot configured to load the information recording medium, the information recording medium having plural areas in which data is managed by independent file systems and further storing information about a ratio of a size of an area included in the non-authentication area to a size of a corresponding area included in the authentication area, as the setting condition to set each size of the plural areas; and

a file system controller configured to control the file systems established on the information recording medium loaded in the slot,

wherein the file system controller transmits a command for requesting area size setting to the information recording medium to set a size of each area in the information recording medium, and specifies the size of area in the information recording medium, and, in order to set the size of each area of the information recording medium, the file system controller transmits a size of one area in either one of the non-authentication area and the authentication area, to the information recording medium.

17. (Currently Amended) An accessing device for writing and reading data to and from an information recording medium which stores data, the information recording medium having an authentication area which allows access only when authentication is successful and a non-authentication area which allows access regardless of a result of the authentication, the non-authentication area and authentication area respectively having plural areas, [[,]] the accessing device comprising:

a slot configured to load the information recording medium, the information recording medium has plural areas in which data is managed by independent file systems and further stores information about a ratio of a size of an area included in the non-authentication area to a size of a corresponding area included in the authentication area, as a setting condition to set each size of the plural areas in the information recording medium; and

a file system controller configured to control the file systems established on the information recording medium loaded in the slot,

wherein the file system controller transmits a command for requesting area size setting to the information recording medium to set the size of each area in the information recording medium, and, in order to set the size of each area of the information recording medium, the file system controller transmits the size of each area in either one of the non-authentication area and authentication area, to the information recording medium.

18. (Currently Amended) An accessing device for writing and reading data to and from an information recording medium storing data and having an authentication area which allows access only when authentication is successful and a non-authentication area which allows access

regardless of a result of the authentication, the non-authentication area and authentication area respectively having plural areas, [[,]] the accessing device comprising:

a slot configured to load the information recording medium, the information recording medium having plural areas in which data is managed by independent file systems, and setting each size of the plural areas in the information recording medium by using a setting condition, which is a composition ratio of each area in the non-authentication area or the authentication area; and

a file system controller configured to control the file systems established on the information recording medium loaded in the slot,

wherein the file system controller transmits a command for requesting area size setting to the information recording medium to set the size of each area in the information recording medium, and, in order to set the size of each area of the information recording medium, the file system controller transmits the size of each area in either one of the non-authentication area and the authentication area, to the information recording medium.

19. (Previously Presented) An accessing device for writing and reading data to and from an information recording medium storing data and having an authentication area which allows access only when authentication is successful and a non-authentication area which allows access regardless of a result of the authentication, the non-authentication area and authentication area respectively having plural areas, the accessing device comprising:

a slot configured to load the information recording medium, the information recording medium having plural areas in which data is managed by independent file systems and further

storing plural combinations of sizes of areas in the non-authentication area and authentication area; and

a file system controller configured to control the file systems established on the information recording medium loaded in the slot;

wherein the file system controller transmits a command for requesting area size setting to the information recording medium to set the size of each area in the information recording medium, and, in order to set the size of each area of the information recording medium, the file system controller transmits information for selecting one combination from the plural combinations stored in the information recording medium, to the information recording medium.

20. (Canceled).

21. (Previously Presented) The accessing device according to claim 16, wherein the file system controller transmits only a discrete value for the size of an area to be specified for setting the size of each area of information recording medium.

22. (Previously Presented) The accessing device according to claim 16, wherein the file system controller sets the size of the one area to be transmitted for setting each area of the information recording medium to be larger than a total size of inaccessible blocks, which is calculated by an entire size of the information recording medium or the size of each area in the information recording medium and a rate of accessible blocks.

23-25. (Canceled).

26. (Previously Presented) An area setting method of an information recording medium having plural areas storing data, the information recording medium has an authentication area which allows access by an accessing device only when authentication is successful, and a non-authentication area which allows access by the accessing device regardless of a result of the authentication, and the non-authentication area and authentication area have plural areas respectively,

the area setting method comprising:

storing, in a data storage, a size of the non-authentication area of the information recording medium and a ratio of a size of the area in the non-authentication area to a size of the corresponding area in the authentication area, as a setting condition the plural areas of the information recording medium are managed by mutually independent file systems;

receiving, by a command receiver, from outside of the information recording medium, a command for requesting setting of a size of each area in the information recording medium, and a size of one area in one of the non-authentication area and the authentication area;

setting a size of each area in the information recording medium based on the setting condition, according to the received command, the setting comprising:

determining a size of each area of the non-authentication area and the authentication area on the basis of the received size of one area and the ratio; and

setting the size of each area of the information recording medium on the basis of the received size and determined size.

27. (Currently Amended) An area setting method of an information recording medium having plural areas storing data, [[,]] wherein the information recording medium has an authentication area which allows access by the accessing device only when authentication is successful, and a non-authentication area which allows access by the accessing device regardless of a result of the authentication, and the non-authentication area and authentication area have plural areas respectively,

the area setting method comprising:

storing, in a data storage, a size of the non-authentication area of the information recording medium, and a ratio of a size of the area in the non-authentication area to a size of the corresponding area in the authentication area, as a setting condition, the information recording medium having plural areas storing data, which are managed by mutually independent file systems;

receiving, by a command receiver, from outside of the information recording medium, a command for requesting setting of an area size of the information recording medium and a size of each area in one of the non-authentication area and the authentication area;

setting a size of each area in the information recording medium based on the setting condition, according to the received command, the setting comprising:

determining the size of each area of the non-authentication area and the authentication area on the basis of the received size of each area and the ratio; and

setting the size of each area of the information recording medium on the basis of the received size and determined size.

28. (Currently Amended) An area setting method of an information recording medium having plural areas storing data, [[,]] wherein the information recording medium has an authentication area which allows access by the accessing device only when authentication is successful, and a non-authentication area which allows access by the accessing device regardless of a result of the authentication, and the non-authentication area and authentication area have plural areas respectively,

the area setting method comprising:

receiving, ~~in a data storage,~~ by a command receiver, from outside of the information recording medium, a command for requesting setting of an area size of the information recording medium and a size of each area in one of the non-authentication area and the authentication area, the plural areas of the information recording medium are managed by mutually independent file systems;

setting a size of each area in the information recording medium based on a predetermined setting condition, according to the received command, the setting comprising:

calculating a composition ratio of each area of the non-authentication area or the authentication area based on the received size of each area;

determining a size of each area in an other of the non-authentication area and the authentication area on the basis of the calculated composition ratio, and

setting the size of each area of the information recording medium on the basis of the received size and determined size.

29. (Currently Amended) An area setting method of an information recording medium having plural areas storing data, wherein the information recording medium has an

authentication area which allows access by the accessing device only when authentication is successful, and a non-authentication area which allows access by the accessing device regardless of a result of the authentication, and stores plural combinations of sizes of areas in the non-authentication area and the authentication area,

the area setting method comprising:

receiving, ~~in a data storage,~~ by a command receiver, from outside of the information recording medium, a command for requesting setting of an area size of the information recording medium and specific information for selecting one combination from the plural combinations, the plural areas of the information recording medium are managed by mutually independent file systems,

setting a size of each area in the information recording medium based on a predetermined setting condition, according to the received command,

selecting the one combination from the stored plural combinations according to the received specific information, and

setting the size of each area in the information recording medium according to the selected combination.

30. (Canceled).

31. (Previously Presented) The area setting method according to claim 26 wherein only discrete values are allowed as the size of each area to be set.

32. (Previously Presented) The area setting method according to claim 26 wherein the size of each area in the information recording medium is set to be larger than a total size of inaccessible blocks, in which the total size of inaccessible blocks are calculated from an accessible block rate and an entire size of the information recording medium or a size of each area of the information recording medium.